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RECEIVED-DNR
JAN 7 - 2014
DRINKING WATER & GW

TRANSMITTAL

To: Department of Natural Resources
Private Water Systems Section - DG/2
P.O. Box 7921
Madison, WI 53707-7921

Date: January 2, 2014

SEH File No.: _____

Client No.: _____

Re: Source Energy Services

We are:

☒ Enclosing ☐ Sending under separate cover ☐ Sending as requested

High Capacity Well Application & $500 fee

For your:

☐ Information/Records ☐ Review and comment ☒ Approval
☐ Action ☐ Distribution ☐ Revision and resubmittal

Remarks:

Please note that the previous applications were made under File Number 03-3-0017.

By: Susan Wojtkiewicz

c: Ted Peterson, Plant Manager – Source Energy Services

07.13

State of Wisconsin
Department of Natural Resources
Private Water Systems Section - DG/2
dnr.wi.gov

High Capacity, School or Wastewater Treatment Plant Well Approval Application

Form 3300-256 (R 7/05)

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Notice: Prior department approval is required for the construction, reconstruction or operation of a high capacity well or system of high capacity wells, a school well or a wastewater treatment plant well in accordance with Section NR 812.09(4)(a), Wisconsin Administrative Code. Personally identifiable information collected on this form, including such data as your name, address and phone number, will be used for management of department programs and is unlikely to be used for other purposes. This information will be addressable under Wisconsin's Open Records Laws, ss. 19.32 - 19.39, Wis. Stats.

Use this form to request an approval for installation of a well or wells on a high capacity property, seek approval to make other changes to a high capacity property or to modify a well on a high capacity property, as required by NR 812.09(4)(a), Wisconsin Administrative Code. Refer to definitions of high capacity well, high capacity property and high capacity well system on page 5.

This form is not intended to be used when seeking approval for construction or modification of wells serving water systems regulated under ch. NR 811, Wis. Adm. Code. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartments, 10 or more condominiums, or 10 or more duplexes is regulated under ch. NR 811, Wis. Adm. Code. See NR 811.01, Wis. Adm. Code for applicability requirements.

Applicant Information

Application Prepared By (Name and Title)	Company		
Susan Wojtkiewicz, Project Manager	SEH		
Street Address	**City**	**State**	**ZIP Code**
1701 W. Knapp St. Suite B	Rice Lake	WI	54868
Telephone Number	**Fax Number**	**E-Mail Address**	
715.861.4918	715.234.4069	swojtkiewicz@sehinc.com	

Property Ownership Information

Property owner, if different than applicant (Name of Person and Title)	Company		
Ted Peterson, Plant Manager	Source Energy Services		
Street Address	**City**	**State**	**ZIP Code**
2595 State Highway 8	Cameron	WI	54822
Telephone Number	**Fax Number**	**E-Mail Address**	
715.859.6452	715.859.6455	tpeterson@sourceenergeyservices.com	

Well Operator Information

Well operator if different than owner (Name of Person and Title)	Company		
Street Address	**City**	**State**	**ZIP Code**
Telephone Number	**Fax Number**	**E-Mail Address**	

Property Information

Enter the High Capacity Well File Number below if the property is already a high capacity property. If the property is not designated as a high capacity property at the time of application, enter "NONE." NOTE: Find the file number in upper right hand corner of the most recent high capacity well approval, or use the compact disk of departmental well data that is issued to drillers and pump installers. On the compact disk, see "File location" in red print in "Location" section. File number format is as follows: (1 or 2 digits for county) - (1 digit for well classification) - (1 to 4 digits for assigned property no.).

County	Town	High Capacity Well File No.
Barron	Sumner	03-3-0017

Submittal Purpose

Check all that apply:

- [X] Install one or more new wells with a capacity greater than 70 gallons per minute.
- [ ] Install one or more new wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Replace one or more wells with a capacity greater than 70 gallons per minute.
- [ ] Replace one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Reconstruct one or more wells with a capacity greater than 70 gallons per minute.
- [ ] Reconstruct one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Increase pumping rate in one or more wells to a rate greater than previously approved.
- [ ] Request continued operation of high capacity wells after a change in ownership. (No application fee required.)
- [ ] Renew a previous approval that has expired.
- [ ] Well (or wells) will serve a school or wastewater treatment plant. See definitions on page 5.
- [ ] Other, explain _____

Site Status Information

Determine the site status using the internet or the compact disk of departmental well data that is issued to drillers and pump installers and the information supplied by the property owner. Internet address is dnr.wi.gov/org/water/dwg/dws.htm. Enter YES or NO for each of the following questions.

YES NO

☐ ☒ Has the property boundary changed since the most recent high capacity well approval was issued? If the property is not yet a high capacity property, check NO.

☒ ☐ Has there been a change in well ownership since the last approval was written?
If YES, name of current owner: Date of purchase:
Through reorganization of assets, Owner name changed to Source Energy Services effective October 15, 2013.

☒ ☐ Has there been a change in well operator since the last approval was written?
If YES, name of current operator: Date of change:
Owner and operator are the same - see question above.

☐ ☒ Will a proposed well be connected to a plumbing system that is supplied by other sources (other wells, municipal supply, etc.)? If YES, include a schematic drawing showing backflow protection.

☐ ☒ Is a proposed well within 1,200 feet of a landfill? Determine if there are any landfills nearby, using the well information compact disk FIND feature. Enter the township, range and section of the well location. If the well is near a section line, also check the adjacent section or sections.
If YES, list the landfill site ID Number: OR Landfill location: (Township/Range/Section)

☐ ☒ Is a proposed well on a property that has a contaminated site? If YES, list the BRRTS (Bureau for Remediation and Redevelopment Tracking System) Number here and specify if the site is open or closed:
☐ Open ☐ Closed

☐ ☒ Is a proposed well on a property that has a groundwater use restriction recorded on the deed? If YES, list the BRRTS number, as assigned to the contaminated site by the DNR remediation and redevelopment program:

☐ ☒ Is a proposed well on a property that is listed on the department's registry of closed remediation sites for a groundwater use restriction? See compact disk or internet at maps.dnr.state.wi.us/imf/dnrimf.jsp?site=brrts. If YES, list the BRRTS Number here:

☐ ☒ Is a proposed well to be used for a public water supply system that serves 25 or more people? See definition of a "public water system" in the definitions section on page 5.

☐ ☒ Is a proposed well to be installed within a special casing area? Refer to the list of special casing areas that is published by the department and/or contact the regional DNR office.

☐ ☒ Has the number of wells or pumping capacity in an existing well increased since the most recent high capacity well approval was issued?

☐ ☒ Has the number of wells decreased since the most recent high capacity well approval? If the property is not yet a high capacity property, check NO.

☒ ☐ Is a non-pressurized storage vessel (i.e. reservoir) other than a pond proposed or in use?

☐ ☒ Will the well discharge directly to a storage pond?

☐ ☒ Is a pressurized tank with a capacity greater than 1,000 gallons proposed or in use?

☐ ☒ Is a proposed well within 1,200 feet of a quarry?

☐ ☒ Is a proposed well located in a floodplain or floodway?

☐ ☒ Are any existing well installations on the high capacity property out of compliance with Chapter NR 812, Wisconsin Administrative Code?

☐ ☒ Will the well be used as a source of bottled water?

☐ ☒ Are you seeking a variance to construct a well that has a capacity of less than 70 gallons per minute to low capacity well construction standards?

☐ ☒ Is the property served by a community water system?

Existing Well Information

Enter the following information on all **existing** wells on the property, if more than four wells, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	Farm & home	North Well (TW 1)	South Well	Test Well 2
Well Number Assigned by Owner (001, 002, etc.):	001	002	003	005
WI Unique Well Number or NA if no number:	NA	YG067	YH353	YK046
Permanent DNR High Capacity Well Number or N/A if none:	71973	71974	71975	N/A
Public Water System ID Number, if Public (if not public, NONE):	NONE	NONE	NONE	NONE
Potable or Non-Potable Use:	Potable	Non-potable	Non-potable	Non-potable
Type of Well (Irrigation, Industrial, Residential, etc.):	Residential	Industrial	Industrial	Test well
Requested Average Water Usage per Day in Gallons:	500	108,000	108,000	288,000
Requested Maximum Water Usage per Day in Gallons:	1000	234,000	234,000	288,000
Seasonal? (April to October, Year Around, etc.):	Year Around	April - November	April - November	
Approved Pumping Capacity if Previously Approved (gpm):	10	350	350	
Current Pump Type & Capacity (gpm):		350	350	
Proposed Pump Type & Capacity if Change Requested (gpm):				
Pump Discharge Type (Over Top of Casing Seal, Pitless, etc.):		Pitless adapter	Pitless adapter	
Discharge Location (Building Pressure Tank, Pond, etc.):	Building pressure tank	Storage tank	Storage tank	
Height of Well Casing Above Ground in Inches:	12	18	24	14
Potential Contaminant Sources and Distance:	Septic - 50'	Septic - 1,150'	N/A	N/A
Well Loc: Quarter Quarter Section	SE 1/4 of SE 1/4	NE 1/4 of SE 1/4	SE 1/4 of SE 1/4	NE 1/4 of NE 1/4
or Government Lot Number				
Section or French Long Lot No.	29	29	29	29
Township:	T 34 N	T 34 N	T 34 N	T 34 N
Range (Select E or W):	R 10 ☐E ☒W	R 10 ☐E ☒W	R 10 ☐E ☒W	R 10 ☐E ☒W
Latitude (Degrees and Minutes)	45 ° 23.7065 '	45 ° 23.852 '	45 ° 23.656 '	45 ° 24.3268 '
Longitude (Degrees and Minutes)	- 91 ° 37.4238 '	- 91 ° 37.605 '	- 91 ° 37.592 '	- 91 ° 37.6181 '
GPS Map Datum (WGS84, WTM91, etc.)	NAD 27	NAD 27	NAD 27	GPS007

Include as much of the following information as practical for wells that do not have well construction records attached to the application, however if the well construction record is attached, applicant may leave the following rows blank.

Date of Construction:	6/9/1966	12/14/2011	10/01/2012	10/28/2013
Drilled by (Name of Drilling Firm):	Ira Calkins	Aqua-Service, Inc.	Aqua-Service, Inc	Aqua-Service, Inc.
Drilling Method(s) (Rotary, Percussion, Etc.)		Rotary	Rotary	Rotary
Well Depth in Feet:	115	260	280	280
Upper Enlarged Drillhole Diameter in Inches and Depth in Feet:	6 inches, 22 feet	12 inches, 80 feet	12 inches, 100 feet	10 inches, 59 feet
Lower Drillhole Diameter in Inches and Depth in Feet:	4 inches, 115 feet	8 inches, 260 feet	8 inches, 280 feet	6 inches, 280 feet
Well Casing Diameter in Inches and Depth in Feet:	4 inches, 30 feet	8 inches, 80 feet	8 inches, 102 feet	6 inches, 60 feet
Well Casing Material and Wall Thickness:	STD	STD (min. 0.33")	STD (min. 0.33")	STD (min. 0.28")
Annular Space Material Between Casing and Drillhole Wall:	Cement grout	Cement grout	Cement grout	Cement grout
Is There a Well Screen (Y or N) If so, Screen Material?:	N	N	N	N

Existing Well Information

Enter the following information on all **existing** wells on the property, if more than four wells, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	Scale House/Office			
Well Number Assigned by Owner (001, 002, etc.):	004			
WI Unique Well Number or NA if no number:	YI612			
Permanent DNR High Capacity Well Number or N/A if none:	72508			
Public Water System ID Number, if Public (if not public, NONE):	NONE			
Potable or Non-Potable Use:	Potable			
Type of Well (Irrigation, Industrial, Residential, etc.):	Commercial			
Requested Average Water Usage per Day in Gallons:	2,000			
Requested Maximum Water Usage per Day in Gallons:	5,000			
Seasonal? (April to October, Year Around, etc.):	Year Around			
Approved Pumping Capacity if Previously Approved (gpm):	20			
Current Pump Type & Capacity (gpm):	20			
Proposed Pump Type & Capacity if Change Requested (gpm):				
Pump Discharge Type (Over Top of Casing Seal, Pitless, etc.):	Pitless adapter			
Discharge Location (Building Pressure Tank, Pond, etc.):	Building pressure tank			
Height of Well Casing Above Ground in Inches:	16			
Potential Contaminant Sources and Distance:	Holding tank - 100' Building overhang - 80'			
Well Loc: Quarter Quarter Section	NE 1/4 of NE 1/4	1/4 of 1/4	1/4 of 1/4	1/4 of 1/4
or Government Lot Number				
Section or French Long Lot No.	29			
Township:	T 34 N	T N	T N	T N
Range (Select E or W):	R 10 ☐E ☒W	R 10 ☐E ☐W	R ☐E ☐W	R ☐E ☐W
Latitude (Degrees and Minutes)	45 ° 24.407 '	° '	° '	° '
Longitude (Degrees and Minutes)	-91 ° 37.450 '	° '	° '	° '
GPS Map Datum (WGS84, WTM91, etc.)	GPS007			

Include as much of the following information as practical for wells that do not have well construction records attached to the application, however if the well construction record is attached, applicant may leave the following rows blank.

Date of Construction:	11/26/2012			
Drilled by (Name of Drilling Firm):	Aqua-Service, Inc.			
Drilling Method(s) (Rotary, Percussion, Etc.)	Rotary			
Well Depth in Feet:	122			
Upper Enlarged Drillhole Diameter in Inches and Depth in Feet:	inches, feet	inches, feet	inches, feet	inches, feet
Lower Drillhole Diameter in Inches and Depth in Feet:	6 inches, 122 feet	inches, feet	inches, feet	inches, feet
Well Casing Diameter in Inches and Depth in Feet:	6 inches, 38 feet	inches, feet	inches, feet	inches, feet
Well Casing Material and Wall Thickness:	STD (min. 0.28")			
Annular Space Material Between Casing and Drillhole Wall:	Granular bentonite			
Is There a Well Screen (Y or N) If so, Screen Material?:	N		N	N

Proposed Well Information

Enter the following information on all **proposed** wells on the property, if more than two wells or alternate construction, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	Plant Well	
Well Number Assigned by Owner (001, 002, etc.):	005	
Well Loc: Quarter Quarter Section or French Long Lot Number	NE 1/4 of NE 1/4 of Section 29	1/4 of 1/4 of Section
or Government Lot Number		
Township & Range (Select E or W)	T 34 N, R 10 ☐ E ☒ W	T N, R ☐ E ☐ W
Latitude (Degrees and Minutes)	4 5 ° 2 4 . 3268 '	° '
Longitude (Degrees and Minutes)	- 9 1 ° 3 7 . 6181 '	° '
GPS Map Datum (WGS84, WTM91, etc.)	GPS007	
Type of Well (Irrigation, Industrial, Residential, etc.):	Type: Industrial ☐ Potable ☒ Non-Potable	Type: ☐ Potable ☐ Non-Potable
Drilling Method(s) (Rotary, Percussion, Etc.):	Rotary	
Anticipated Geological Materials and Depths that Are Expected During Drilling:		
Material and Depth Interval:	Tan/brown clay from 0 ' to 3 '	from 0 ' to '
Material and Depth Interval:	Yellow sandstone from 3 ' to 280 '	from ' to '
Material and Depth Interval:	from ' to '	from ' to '
Material and Depth Interval:	from ' to '	from ' to '
Material and Depth Interval:	from ' to '	from ' to '
Drillhole Diameter and Anticipated Depth Intervals:		
Diameter and Depth Interval:	10 from 0 ' to 59 '	from ' to '
Diameter and Depth Interval:	6 from 59 ' to 280 '	from ' to '
Diameter and Depth Interval:	from ' to '	from ' to '
Permanent Casing or Liner Diameter and Wall Thickness at Anticipated Depth Intervals:		
Diameter and Wall Thickness at Depth Interval:	6 " diam/ 0.28 " thick 0 ' to 60 '	" diam/ " thick 0 ' to '
Diameter and Wall Thickness at Depth Interval:	" diam/ " thick ' to '	" diam/ " thick ' to '
Permanent Casing or Liner Material , If Used:		
Casing Joints (Welded, T and C, etc.)	Welded	
Material and Weight at Depth Interval:	Steel / 19.4lbs/foot 0 ' to 60 '	/ lbs/foot 0 ' to '
Material and Weight at Depth Interval:	/ lbs/foot ' to '	/ lbs/foot ' to '
Screen Material, Slot Size in Inches and Depth Interval or N/A if none:	/ "/ ' to '	/ "/ ' to '
Casing to Screen Joint (Welded, T and C, K Packer, etc.)		
Annular Space Material including Filter Pack Material, If Used:		
Material and Depth Interval:	/ 0 ' to '	/ 0 ' to '
Material and Depth Interval:	/ ' to '	/ ' to '
Proposed Average Water Usage Per Day in Gallons:	288,000	
Proposed Maximum Water Usage Per Day in Gallons:	288,000	
Seasonal? (April to October, Year Around, etc.):	Year Around	
Proposed Pump Type & Capacity (gpm):	Submersible, 200 gpm	
Discharge Type (Over Top of Casing Seal, Pitless Adapter or Unit):	Pitless adapter	
Discharge Location (Building Pressure Tank, Pond, etc.):	Pond	
Distance and Direction to Nearest Public Utility Well & Well Name:	13,335' West - Jennie-O Turkey Store	
Distance to Other Potential Contaminant Sources:	14,400' NW - Town of Sumner LUST site and landfill	
Distance to Other Potential Contaminant Sources:	22,400' SE - Antczak Inventory Farm	
Leave Blank, for Department use only		

Required Attachments

1. Attach one of the maps described in A. or B., below. Plot the existing and proposed well locations on the map. For wells that have a Wisconsin Unique Well Number or a Permanent High Capacity Well Number, plot the well locations with one of those numbers.
   A. Copy of a plat map with the property boundary clearly shown. If the property is contiguous with properties owned by the same owner in another township, include a copy of that township map too, showing the property boundaries. If the property owner listed on the plat map is different from the current owner, list the date or dates, that the current property owner purchased the property on the map.
   B. Map of the property prepared by a licensed land surveyor and the property description as described by the surveyor.
2. Sketch map showing all of the following that are planned or exist within 300 feet of each proposed well: proposed well location; other wells; property boundary; wetlands; potential contaminant sources (septic tank and drainfield, petroleum storage tanks, sewer lines, etc.); buildings and north arrow. If no pertinent features to map within 300 feet of the proposed well, for example an irrigation well in the middle of a field, state that on the property map listed above and plot the well locations on that map.
3. Any well construction records available for existing wells on the property. Do not attach any well construction records for wells that are not on the property. If a Wisconsin Unique Well Number has not been assigned, write a well name or site well number on the record that correlates to the well name or number plotted on the maps.
4. For proposed wells with a capacity greater than 400 gallons per minute, include the performance curve or performance table that is provided by the pump manufacturer. If the pump will be a lineshaft turbine, provide a curve with the same rpm as the motor under full load and list the motor horsepower.
5. If more than one well is connected to a common plumbing system, also provide a schematic drawing of the system showing method of preventing backflow. This sketch must include the well discharge (pitless, over top of casing sanitary seal); the water line from the well; pressure tanks; sampling faucets; check valves; backflow preventers; air gaps; manually operated valves; water meters; pressure switches for pumps; and any other pertinent fittings. This schematic drawing must also identify which of these components are buried or above ground. If there is more than one check valve within the well casing, include in-well check valves on the schematic.
6. If reconstruction of an existing well is proposed, include a diagram of the current well construction and a diagram of the proposed construction.
7. If the application is for a high capacity well or wells, a $500.00 check payable to the Department of Natural Resources, unless the application is only for continued operation after a change of ownership.

Certification and Applicant Signatures

If the application requests a variance for a well within 1,200 feet of a landfill, a well on a property with a groundwater use restriction, or any other variance to NR 812, Wis. Adm. Code, the property owner must sign the application. If the well operator will install a well on property that he or she does not own, the property owner must also sign the application. Otherwise, an agent of the owner may sign the application.

Unsigned and incomplete applications will not be approved.

By signing this form, the person signing this application certifies that to the best of his or her knowledge, all existing well installations on the property comply with ch. NR 812, Wis. Adm. Code. The person also certifies that to the best of his or her knowledge, all information in the application is accurate and correct.

Name - Print		Check Box	
Ted Peterson - Plant Manager		☐ Owner	☒ Agent of the Owner
Signature	**Company**	**Date**	
Ted Peterson	Source Energy Services	1-2-2014	

Application submittal. Mail completed application and payment with all required attachments to DNR, Private Water Systems Section - DG/2, PO Box 7921, Madison WI 53707-7921.

Definitions from Wisconsin Administrative Codes

"High capacity well" means a well constructed on a high capacity property. [NR 812.07(51)]

"High capacity property" means one property on which a high capacity well system exists or is to be constructed. [NR 812.07(52)]

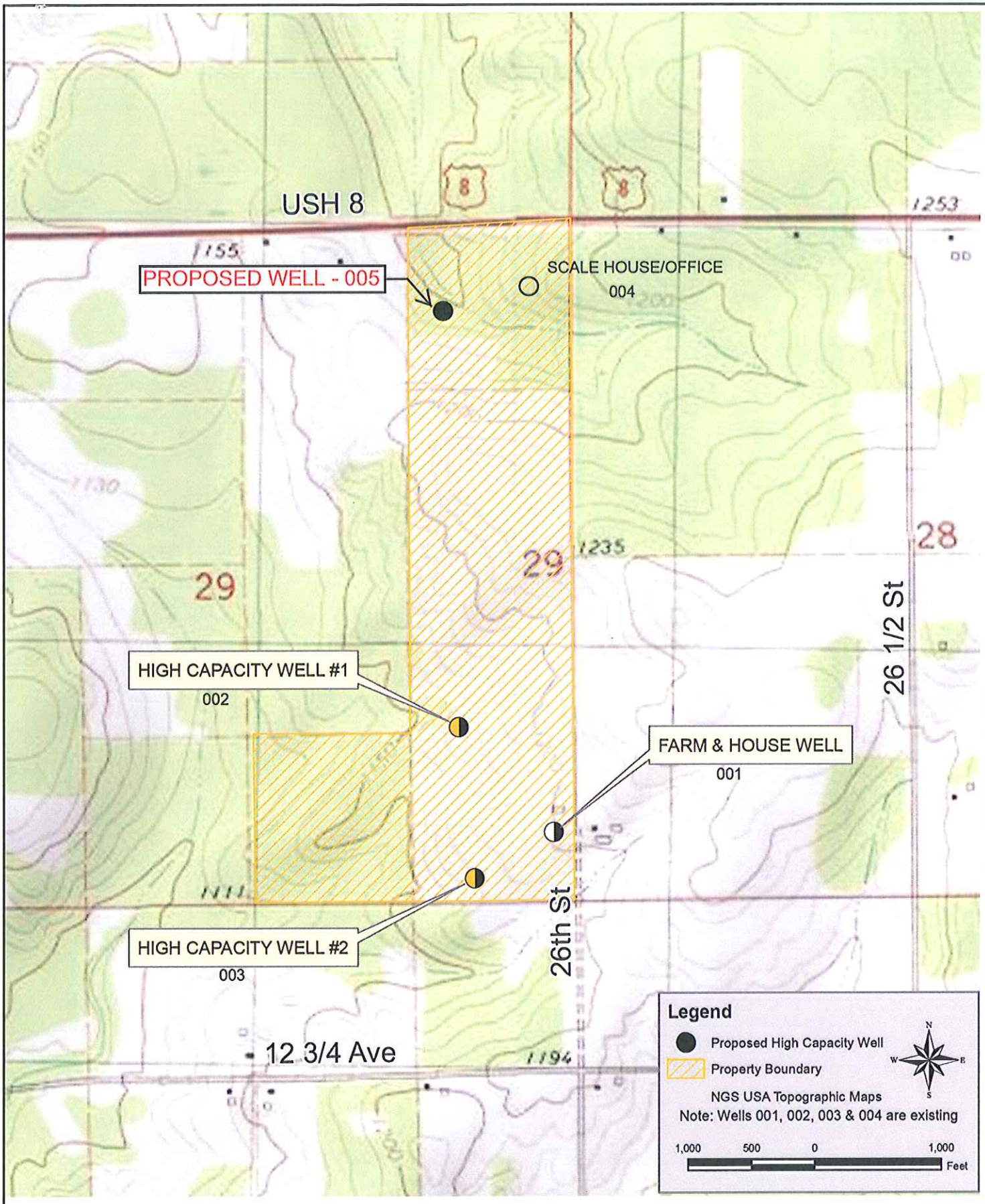
"High capacity well system" means one or more wells, drillholes or mine shafts used or to be used to withdraw water for any purpose on one property, if the total pumping or flowing capacity of all wells, drillholes or mine shafts on one property is 70 or more gallons per minute based on the pump curve at the lowest system pressure setting, or based on the flow rate. [NR 812.07(53)]

"Public water system" means a system for the provision to the public of piped water for human consumptions if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such system includes: (a) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (b) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. [NR 812.07(80)]

"School" means a public or private educational facility in which a program of educational instruction is provided to children in any grade or grades from kindergarten through the 12th grade. Water systems serving athletic fields, school forests, environmental centers, home-based schools, day-care centers and Sunday schools are not school water systems. [NR 812.07(94)]

"Wastewater treatment plant" means any facility provided for the treatment of sanitary or industrial wastewater or both. The following types of facilities are excluded: (a) Facilities defined as private sewage systems in s. 145.01(12), Stats. (b) Pretreatment facilities from which effluent is directed to a public sewer system for treatment. (c) Industrial wastewater treatment facilities which consist solely of a land disposal system. [NR 114.03(14)]

Figure 1 - Aerial Photo



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DATE:
01/02/2014

PROPOSED HIGH CAPACITY WELL LOCATION

Barron County, Wisconsin
T34N, R10W, SECTION 29